

Claims

1. A light-emitting component comprising
 - at least one primary radiation source that in operation emits an electromagnetic primary radiation, and
 - at least one luminescence conversion element by means of which at least a portion of the primary radiation is converted into a radiation of altered wavelength, characterized in that disposed after said luminescence conversion element in a radiation direction of the component is a filter element comprising a plurality of nanoparticles, said nanoparticles comprising a filter substance which by absorption selectively reduces the radiation intensity of at least one spectral subregion of an unwanted radiation.
2. The component as in claim 1, characterized in that said unwanted radiation is the primary radiation or a spectral subregion of the primary radiation.
3. The component as in one of the preceding claims, characterized in that said unwanted radiation is from or overlaps with a UV wavelength range of less than or equal to 420 nm.
4. The component as in one of the preceding claims, characterized in that said primary radiation source comprises at least one luminescent diode that in operation emits UV radiation and/or blue light.

5. The component as in one of the preceding claims,
characterized in that
the radiation intensity of the spectral subregion of said unwanted radiation is reduced by
at least 50%.
6. The component as in one of the preceding claims,
characterized in that
said nanoparticles have a d_{50} value which, measured in Q_0 , is less than or equal to 25 nm
and greater than or equal to 1 nm.
7. The component as in one of the preceding claims,
characterized in that
said nanoparticles have a d_{50} value which, measured in Q_0 , is less than or equal to 21 nm
and greater than or equal to 1 nm.
8. The component as in one of the preceding claims,
characterized in that
said nanoparticles have a d_{50} value which, measured in Q_0 , is less than or equal to one-
twentieth of the minimum wavelength of an unwanted radiation and greater than or equal
to 1 nm.
9. The component as in one of the preceding claims,
characterized in that
the filter substance comprises at least one material from the group consisting of the metal
oxide group of materials, the sulfide group of materials, the nitride group of materials and
the silicate group of materials.
10. The component as in claim 9,
characterized in that
said filter substance comprises at least one material from the group consisting of titanium
dioxide, cerium dioxide, zirconium dioxide, zinc oxide, tungsten oxide, zinc sulfide and
gallium nitride.

11. The component as in one of the preceding claims,
characterized in that
said nanoparticles are embedded in a matrix material.
12. The component as in claim 11,
characterized in that
said matrix material is insensitive to UV radiation.
13. The component as in claim 12,
characterized in that
said matrix material comprises at least one material from the group consisting of silicone,
spin-on glasses, silicon compounds and polymers.